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## **REMARKS**

Claims 1, 2, 4, 5 and 7-13 are now pending in the present application. Claims 1, 4 and 7 have been amended and claim 13 has been added. No new matter is involved. Claims 1, 4 and 7 are independent. Reconsideration of this application, as amended, is respectfully requested.

## Rejections Under 35 U.S.C. § 112, Second Paragraph

Claim 1 stands rejected under 35 USC § 112, Second Paragraph for containing inconsistent language. However, this rejection is respectfully traversed because claim 1, as amended, does not contain the allegedly inconsistent language.

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

## Rejections Under 35 U.S.C. § § 102 and 103

Claims 1 2, 4, 5 and 7-12 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Lutz et al, U.S. Patent No. 6,592,465. Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lutz et al. These rejections are respectfully traversed.

Claim 1, as amended, recites a ball trajectory measuring apparatus comprising a first camera having an angle of view for photographing a flying ball from a back of the flying ball; a second camera having an angle of view overlapping with the angle of view of the first camera and serving to photograph the back of the flying ball later than the first camera; a third camera for photographing a front of the flying ball; a control portion for controlling

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photographing timings of the first, second and third cameras for obtaining a plurality of

synchronized images by the first, second and third cameras; and a calculating portion for

calculating position coordinates of the ball based on image data obtained by the first,

second and third cameras as time series data with the flight of the golf ball, by triangulation,

and based on the calculated position coordinates, the ball trajectory ,

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Claim 4, as amended, recites a ball trajectory measuring apparatus comprising a first

camera having an angle of view for photographing a front of a flying ball; a second camera

having an angle of view overlapping with the angle of view of the first camera and serving to

photograph the front of the flying ball earlier than the first camera; a third camera for

photographing a back of the flying ball; a control portion for controlling photographing timings

of the first, second and third cameras for obtaining a plurality of synchronized images by the

first, second and third cameras; and a calculating portion for calculating position coordinates

of the ball based on image data obtained by the first, second and third cameras as time series

data with the flight of the golf ball, by triangulation, and based on the calculated position

coordinates, the ball trajectory,. wherein the first camera and the second camera are located

at substantially the same distance, at the same elevation and directly behind the launch point,

said first and second cameras are inclined upward from a horizontal direction, and an angle of

inclination of said first camera is greater than an angle of inclination of said second camera.

Claim 7, as amended, recites ball trajectory measuring apparatus comprising a first

camera for photographing a flying ball from a back of the flying ball; a second camera having

an angle of view related to that of the first camera and serving to photograph the back of the

flying ball later than the first camera; a third camera for photographing a front of the flying ball;

a control portion for controlling photographing timings of the first, second and third cameras for

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obtaining a plurality of synchronized images by the first, second and third cameras; and a

calculating portion for calculating position coordinates of the ball based on image data

obtained by the first, second and third cameras as time series data with the flight of the golf

ball, by triangulation, and based on the calculated position coordinates, the ball trajectory,

and wherein the first camera and the second camera are located at substantially the same

distance, at the same elevation and directly behind the launch point, said first and second

cameras are inclined upward from a horizontal direction, and an angle of inclination of said

first camera is greater than an angle of inclination of said second camera.

Lutz does not disclose or suggest this claimed combination of features, including, for

example, a calculating portion for calculating position coordinates of the ball based on

image data obtained by the first, second and third cameras as time series data with the

flight of the golf ball, by triangulation,, and based on the calculated position coordinates, the

ball trajectory the triangulation feature.

In view of the above amendments and remarks, Applicant respectfully submits that

claims 1, 2, 4, 5 and 7-12 clearly define the present invention over the Lutz et al. reference

relied on by the Examiner. Accordingly, reconsideration and withdrawal of the Examiner's

rejections under 35 U.S.C. §§ 102 and 103 are respectfully requested.

Additional Claim

Additional claim 13 has been added for the Examiner's consideration. Applicants

respectfully submit that additional claim 13 is allowable due to its dependence on

independent claim 4, as well as due to the additional features in this claim.

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Favorable consideration and allowance of additional claims 13 is respectfully requested.

## CONCLUSION

Since the remaining references cited by the Examiner have not been utilized to reject the claims, but merely to show the state-of- the-art, no further comments are deemed necessary with respect thereto.

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Robert J. Webster, Registration No. 46,472 at (703) 205-8000 in the Washington, D.C. area.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Date: May 26, 2009

Respectfully submitted,

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